Appl. No. 09/718,500

REMARKS

This letter is responsive to the office action dated March 10, 2003. Claims 1-31 remain in this application. Claims 1-31 have been replaced by new claims 32-45 that more clearly define the subject matter claimed in original claims 1-31. Accordingly, claims 1-31 have been cancelled without prejudice or disclaimer. The Applicants respectfully submit that each of claims 32-45 is in condition for allowance.

Re: 35 U.S.C. 112 Rejection

In paragraph 2 of the office action, the Examiner has rejected claims 1-31 under 35 U.S.C. 112, second paragraph, as failing to set forth in specifically stated presentation the subject matter which the Applicants regard as the invention. The Applicant has replaced claims 1-31 with new claims 32-45, which express the "values" cited in original claims 1-31 more precisely and which further clarify the subject matter as originally claimed in claims 1-31. No new matter has been introduced by this amendment, and claims 32-45 have been presented as new claims for convenience only. Accordingly, the Applicants traverse the Examiner's rejection, and respectfully submit that claims 32-45 as amended are now in condition for allowance.

More specifically, each of claims 32-45 require:

> a) the performing of a simulation in which a plurality of mark-to-future values for each respective portfolio is computed, wherein the simulation is performed on a plurality of instruments over a plurality of future scenarios and a time horizon;
> b) the calculating of a first subset of unrealized gains for each respective portfolio from the plurality of mark-to-future values, the first subset representing the respective portfolio's upside, and wherein the unrealized gains match payoffs of a call option;
> c) the calculating of a second subset of unrealized losses for each respective portfolio from the plurality of mark-to-future values, the second subset representing the respective portfolio's downside, and wherein the unrealized losses match payoffs of a put option; and
> d) the calculating of a call value and a put value for each respective portfolio, wherein the call and put values are functions of the first and second subsets respectively.

Support for this amendment can be found throughout the specification (e.g. page 15 line 18 through page 17 line 31; original claim 1).

Each of new claims 32 through 45 proceeds to define further features relating to various applications in which the calculated call and put values are applied.

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For example, claims 32-38 as amended further require: the solving of a linear program to determine an efficient portfolio from the plurality of portfolios in which the call value therefor is maximized with the put value therefor not exceeding a specified limit, repeated for a plurality of limits to generate at least one efficient portfolio in the constructing of an efficient frontier; the providing of a utility function; and the selecting of an optimal portfolio from the at least one efficient portfolio that maximizes the utility function. Support for this amendment can be found throughout the specification (e.g. page 18 line 23 through line 20 page 3; page 23 line 12 through page 27 line 4; original claims 10-13, 28, and 29).

Claim 39 as amended further requires: the solving of a linear program to determine an efficient portfolio from the plurality of portfolios in which the put value therefor is minimized with the call value therefor being at least a specified limit, repeated for a plurality of limits to generate at least one efficient portfolio in the constructing of an efficient frontier; the providing of a utility function; and the selecting of an optimal portfolio from the at least one efficient portfolio that maximizes the utility function. Support for this amendment can be found throughout the specification (e.g. page 20 lines 4-6; original claims 14-17).

Claim 40 as amended further requires the providing of a utility function dependent on at least one of the call value and put value, and the solving of a mathematical program to determine an optimal portfolio from the plurality of portfolios, wherein the mathematical program incorporates the utility function. Support for this amendment can be found throughout the specification (e.g. page 27 lines 5-15; original claims 18-22).

Claims 41-45 as amended further require the calculating of one or more performance measures for the portfolio from at least one of the call and put values. Support for this amendment can be found throughout the specification (e.g. page 18 lines 1-15; original claims 1-9).

The Applicant also requests that the title of the application be amended, to clarify that the invention relates generally to the computation of call and put values.

Re: Double Patenting Rejection

In paragraph 4 of the office action, the Examiner has rejected claims 1-31 under the judicially created doctrine of double patenting over claims 1-10 of commonly-owned U.S. Patent No. 5,799,287. The Examiner was of the view that the patent and the subject application claimed common subject matter.

As indicated above, the Applicant has amended the claims of the subject application to better clarify the invention. The Applicant respectfully submits that in view of the amended claims 32-45, it will now be apparent that the subject matter presently claimed do not overlap claims 1-10 of U.S. Patent No.

5,799,287. Accordingly, the Applicant requests that the double patenting rejection be withdrawn.

All objections and rejections have been addressed. It is respectfully submitted that the present application is now in position for allowance, and a Notice to that effect is earnestly solicited. If the Examiner believes that a telephone interview would expedite allowance of the application, he is respectfully requested to contact the undersigned.

Respectfully submitted,

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